

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G05D3/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G05D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 136 227 A (NAKANO EIJI ET AL) 4 August 1992 (1992-08-04) abstract column 3, line 36 - column 4, line 55; figure 2b -----	1,10,19
A	US 4 591 772 A (HOLLOW RICHARD H) 27 May 1986 (1986-05-27) abstract; figures 1,2 -----	1,10,19
A	US 4 733 150 A (STEFF JOHANN ET AL) 22 March 1988 (1988-03-22) abstract; figures 1,2 -----	1,10,19
A	US 5 425 237 A (SUER JAMES D) 20 June 1995 (1995-06-20) abstract; figure 1 -----	1,10,19

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the International filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

- "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the International search	Date of mailing of the International search report
27 September 2004	06/10/2004

Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel (+31-70) 340-2040, Tx. 31 651 epo nl, Fax (+31-70) 340-3016	Authorized officer Helot, H
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Information on patent family members

International Application No
PCT/IB2004/051325

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
US 5136227	A 04-08-1992	JP	62060010 A	16-03-1987
US 4591772	A 27-05-1986	NONE		
US 4733150	A 22-03-1988	DE EP	3662984 D1 0211374 A1	01-06-1989 25-02-1987
US 5425237	A 20-06-1995	NONE		